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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,652	10/10/2003	Jeffrey Valentage	2003B106	7245

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EXAMINER

KRUER, KEVIN R

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/681,652	Applicant(s) VALENTAGE ET AL.	
	Examiner Kevin R Kruer	Art Unit 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) 21-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application (PTO-152) |
| 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/12/2004</u> . | 6) ☐ Other: ____. |

DETAILED ACTION

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-20, drawn to an article, classified in class 428, subclass 457+.
 - II. Claims 21-51, drawn to a method of shaping an article, classified in class 29, subclass 527.1+.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product could be made by a materially different process. For example, the product could be made by shaping the metal substrate prior to the deposition of the ionomer layer.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Paige Schmidt on August 4, 2004 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 21-51 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information Disclosure Statement

6. The information disclosure statement filed July 12, 2004 has been fully considered. An initialed copy of said IDS is enclosed with this Office Action.

Drawings

7. The drawings filed October 10, 2003 are accepted.

Specification

8. The disclosure is objected to because of the following informalities: the copy of the claims located at the end of the specification should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-5, 7-11, 13-17, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Akki et al (US 6,020,034).

Akki teaches a coated substrate wherein the coating prepared from a particulate polymer composition that exhibits improved corrosion and creep resistance (abstract). The coating comprises an acid-functionalized particulate polymer wherein the acid functionality of the polymer is maintained within a desired range by crosslinking and or neutralizing said acid. Neutralizing the acid functionality of the polymer component results in hardening of the coatings resulting therefrom (abstract). The acid-functionalized polymer is preferably a copolymer comprising an olefin and an ethylenically unsaturated carboxylic acid (col 4, lines 28+). The preferred olefin is ethylene (col 4, line 30). Preferred unsaturated carboxylic acids are methacrylic and acrylic acids (col 5, lines 44+). The acid groups are neutralized using various ionic salts including those of zinc, aluminum, lithium, sodium, and the like (col 6, lines 13+). Zinc and aluminum salts are preferred (col 6, line 30). Said salt neutralized polymer is understood to read on the claimed ionomer layer of claim 1. Akki teaches said polymer may be pigmented (col 8, line 63). The coating is applied to substrates such as primed or unprimed metal substrates (col 7, lines 46+) such as iron, steel, galvanized steel, aluminum and the like. Said primers layers are understood to be analogous to the claimed tie layers and the priming limitation of claims 8 and 20.

With regard to claim 9, Akki teaches that the coating may be used as a color coat/clearcoat finish (col 9, lines 14+) wherein the basecoat is pigmented (col 8, line 63). Said pigmented layer is considered to be "opaque" because the pigment will inherently diminish the layers transparency to some extent.

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With regard to claims 4, 14, and 17, Akki teaches that both surfaces of the substrate may be coated with the ionomer coating. IN such an instance, one of the ionomeric coatings is understood to read on the thermoplastic barrier coating of claims 4, 14 and 17.

The substrate may be a metal substrate. The metal may be primed or coated before coating with the coating of the invention (col 7, lines 47+). One or more surfaces of the substrate can be coated (col 9, lines 6+). When the substrate is an automobile body, the coating can be applied directly onto the metal surface or primer can be applied first (col 9, lines 12+).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 6, 12, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akki et al (US 6,020,034), as applied to claims 1-5, 7-11, 13-17, 19, and 20 above, and further in view of Kordomenos et al (US 4,491,641).

Akki is relied upon as above, but does not teach that an epoxy primed unpolished metal substrate may be utilized as the substrate of the invention. However, Akki teaches that the substrate may be a metal substrate of an automotive body. Furthermore, Kordomenos teaches an unpolished metal substrate of an automotive vehicle body coated with a primer comprising an epoxy ester resin (col 2, lines 63+).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the substrate taught in Kordomenos in the invention taught in Akki. The motivation for doing so would have been that Kordomenos teaches that such substrates are suitable for use as automotive body panels.

13. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kordomenos et al (US 4,491,641) in view of Akki et al (US 6,020,034).

Kordomenos teaches an unpolished metal substrate of an automotive vehicle body coated with a primer comprising an epoxy ester resin (col 2, lines 63+). Said primer is understood to read on the claimed tie layers and priming steps of claims 8 and 20.

Kordomenos does not teach that said substrate may be coated with the claimed ionomeric coating composition. However, Akki teaches a coating prepared from a particulate polymer composition that exhibits improved corrosion and creep resistance (abstract). The coating comprises an acid-functionalized particulate polymer wherein the acid functionality of the polymer is maintained within a desired range by crosslinking and or neutralizing said acid. Neutralizing the acid functionality of the polymer component results in hardening of the coatings resulting therefrom (abstract). The acid-functionalized polymer is preferably a copolymer comprising an olefin and an ethylenically unsaturated carboxylic acid (col 4, lines 28+). The preferred olefin is ethylene (col 4, line 30). Preferred unsaturated carboxylic acids are methacrylic and acrylic acids (col 5, lines 44+). The acid groups are neutralized using various ionic salts including those of zinc, aluminum, lithium, sodium, and the like (col 6, lines 13+). Zinc

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and aluminum salts are preferred (col 6, line 30). Said salt neutralized polymer is understood to read on the claimed ionomer layer of claim 1. Akki teaches said polymer may be pigmented (col 8, line 63). The coating is applied to substrates such as primed or unprimed metal substrates (col 7, lines 46+) such as iron, steel, galvanized steel, aluminum and the like. Said primers layers are understood to be analogous to the claimed tie layers. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the ionomeric coating taught in Akki to the primed unpolished metal substrate taught in Kordomenos. The motivation for doing so would have been because said coatings impart improved creep and corrosion resistance.

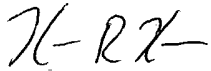
Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin R. Kruer
Patent Examiner-Art Unit 1773